

Some observations on flotation

People tend to view flotation simply as a way of recovering seeds. It is perhaps better viewed as the most specific in our spectrum of general recovery procedures ranging from picks through trowels, screens, fine screens, to flotation. Properly done, it gets not only carbonized plant remains but small retouch flakes, fish bones, snail shells, beads, and other valuable information. Obviously there are lots of ways to float, but the following seems easiest to me:

1. Isolate a block of earth on all sides and measure it. 50 x 50 x 8 centimeters is usually a good size for a sample. The measurements give your analyst volume control ("22 corn kernels per cubic meter of pit fill") which can facilitate between site comparison.

2. Put the earth in a marked doubled-up grocery bag or cloth sack and put this in a dry shady place for a week. For faster drying spread it out in a box in the shady dry place. Drying makes the carbonized items float better and the collidal bonds between any clay particles break down.

3. When dry pour one third to one half you sample slowly into clean water. Pour the water through as fine a screen as you have. A kitchen strainer will do. Put more water in the bucket and stir it up. Pour this water through the screen. Repeat until the water is clean. Be gentle throughout the process. Do the rest of your sample in a similar fashion.

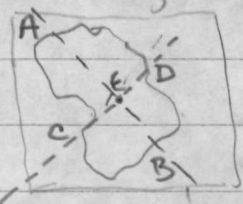
4. Tap the screen on a piece of newspaper and fold it up with a lable. This is your "light fraction". In a few days it will be dry. Open it inside (wind can easily blow away your seeds) and sort out the larger roots, bugs, and other recent intrusions. Put the sample and lable in a marked clean cardboard box to facilitate further drying. Put in some tissue paper to prevent the carbonized items from rattling around and breaking.

5. Take the bucket full of mud and work this very carefully through window screen in a creek or with a hose. Small flakes, sherds, bones, nut shells, etc. will remain. This is your "heavy fraction". It is just as important as the light. It can be wrapped in newspaper with a lable and dried and placed in a marked cardboard box as above.

6. Both light and heavy fraction can be field sorted if an accurate laboratory balance is available. The components - flakes of bifacial retouch, shell tempered sherds, charcoal, other carbonized items, snail shells can be sorted counted and weighed. Then each can be packed separately to be sent to a specialist. This is a very tedious process indeed, and will issustrate why one only floats samples, not whole sites.

Excavation of pits, hearths, etc.

- 1) map in the stain on graph paper (scale 10cm. = 1m)
- 2) have photos taken of this horizontal plane
- 3) section the pit into quadrants* and note the location of these lines on the horizontal view map



* use string with nails at the endpoints

- a) note the elevation of these 5 points
 - 4) remove one quadrant
 - 5) sift the soil removed from that quadrant of the feature or save for flotation
 - 6) map in each profile & note the scale
- eg. assume section AEC is removed 1st, you would have two separate profiles, that running along line AE & that running along line EC
- 7) take pollen samples at 10 cm. intervals from the wall of AE & note where each sample was removed. Also take a sample from the sterile soil to act as a control - note its position on the profile map
- 8) continue removing each quadrant according to steps 4, 5 & 6, with the exception that ^{in step 6} only the newly exposed profile will have to be mapped. The final result will be 2 continuous profile along line AB & line CD

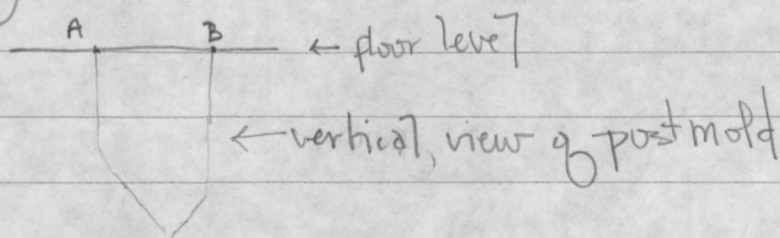
we may photograph the profiles, as well as take flotation samples, but this is dependent upon each feature.

Excavation of postmolds

- 1) map the mold(s) on graph paper (scale 10cm. = 1m.)
- 2) have photos taken (if deemed necessary)
- 3) lay out cross section line on map



- a) note the elevation below ground level of points A & B *optional
- 4) cut a vertical profile along \overline{AB}
- 5) sift the soil removed from the postmold
- 6) map the profile & note the scale



note: easiest way to map in the profile is to lay a meter stick along line \overline{AB} and then measure down along the vertical profile at regular intervals across \overline{AB} .

- 7) note the soil color & texture relative to the sterile soil surrounding the postmold

should there be any chance of make sure the label has the feature number on it.